4.3 BIOLOGICAL RESOURCES

4.3.1 Setting

The Biological Resources section will address the potential impacts related to the proposed Grading and Stormwater Management Ordinances. This section describes the biological resources (e.g. sensitive species, natural communities) found within the planning areas of San Luis Obispo County. Impacts of the proposed project have been evaluated and mitigation measures recommended where appropriate.

a. Biological Characterization of San Luis Obispo County. San Luis Obispo County is biologically diverse due to its physiographic diversity (including coastal areas, mountains, and arid interior). The County includes multiple sensitive plant and wildlife species, as well as a wide range of natural communities.

The California Natural Diversity Database (CNDDB, 2009) was searched in order to determine the diversity of special status species within each planning area that could be affected by development under the proposed ordinances. The United States Fish and Wildlife Service (USFWS) unofficial sensitive plant and animal lists (USFWS July 2009) and the California Department of Fish and Game (CDFG) sensitive plant and animal lists (CDFG July 2009) were also reviewed. These databases/lists contain records of reported occurrences of sensitive resources including: 1) federal- and state-listed endangered or threatened species; 2) federal and state species of special concern; 3) rare and/or endangered plants as specified by the California Native Plant Society (CNPS Lists IA, IB, and 2); and 4) sensitive vegetation communities. The California Native Plant Society's (CNPS) Inventory of Rare and Endangered Vascular Plants of California (Tibor 2001) was also reviewed to provide information on rare plants that were expected to occur in the area. Vegetation/habitat types were classified based on CDFG Preliminary Descriptions of the Terrestrial Natural Communities of California (R. Holland 1986).

- **b.** Habitat Types within San Luis Obispo County. The County is comprised of multiple different natural communities. The term "natural community" is generally intended to refer to plant and wildlife associates in specific habitat types. Some natural communities are considered rare or sensitive by the regulatory agencies. Table 4.3-1 lists each natural community that has the potential or is known to occur in each planning area within the County. Natural communities classified as "rare" are habitats that are either known or believed to be of high priority by the CDFG.
- c. Special-Status Species. For the purpose of this report, special-status species are those plants and animals listed, proposed for listing, or candidates for listing as threatened or endangered by the U.S. Fish and Wildlife Service (USFWS) under the federal Endangered Species Act (ESA); those considered "species of concern" by the USFWS; those listed or proposed for listing as rare, threatened, or endangered by the California Department of Fish and Game (CDFG) under the California Endangered Species Act (CESA); animals designated as "Fully Protected Species" or "Species of Special Concern" by the CDFG; and the CDFG Special Vascular Plants, Bryophytes, and Lichens List (September 2004). This latter document includes the California Native Plant Society (CNPS) Inventory of Rare and Endangered Vascular



Table 4.3-1 Natural Communities/Habitat Types and Potential/Known Occurrences within San Luis Obispo County Planning Areas

| Natural Communities/Habitat Types | Adelaida | El Pomar-Estrella | Estero | Huasna-Lopez | Las Pilitas | Los Padres | Nacimiento | North Coast | Salinas River | San Luis Bay Coastal | San Luis Bay Inland | San Luis Obispo | Shandon-Carrizo | South County Coastal | South County Inland |
|--|----------|-------------------|--------|--------------|-------------|------------|------------|-------------|---------------|----------------------|---------------------|-----------------|-----------------|----------------------|---------------------|
| Agricultural Land ² | • | • | • | • | • | • | | • | • | • | • | • | • | • | • |
| Alvord Oak Woodland | • | | | | | | • | | | | | | • | | |
| Beaches and Coastal Dunes ² | | | • | | | | | • | | • | | | | • | |
| Big Sagebrush Scrub | | | | | | | | | | | | | • | | |
| Black Oak Forest | • | | | | | | | | | | | | • | | |
| Blue Brush Chaparral | | | | | | | | | | | • | | | | |
| Blue Oak Woodlands | • | • | | • | • | • | • | | • | | | | • | | • |
| Buck Brush Chaparral | • | • | • | • | • | • | • | • | • | | | • | • | | • |
| Ceanothus megacarpus Chaparral | | | | | | | | | | | | • | | | |
| Central (Lucian) Coastal Scrub | | | • | • | | | | • | | • | • | • | | • | • |
| Central Coast Arroyo Willow Riparian | | | • | | | | | | | | | | | | |
| Central Coast Cottonwood-Sycamore Riparian | • | • | | | | | • | | • | | | | | | |
| Central Coast Live Oak Riparian Forest | | | | | | | • | • | | | | | | | |
| Central Dune Scrub ¹ | | | • | | | | | | | | • | | | • | • |
| Chamise Chaparral | • | • | | • | • | • | • | • | • | • | • | • | • | | |
| Central Foredunes ¹ | | | | | | | | | | • | | | | • | |
| Central Maritime Chaparral ¹ | | | • | | | | | • | | • | • | • | | | |
| Coast Live Oak Forest | • | • | • | • | • | • | • | • | • | • | • | • | | | • |
| Coast Live Oak Woodlands | • | | | • | | • | | • | • | • | • | • | | | • |
| Coast Range Ponderosa Pine Forest | | | | | | | • | • | | | | • | | | |
| Coastal and Valley Freshwater Marsh ¹ | | | • | | | | | | | • | | • | | • | • |
| Coastal Brackish Marsh ¹ | | | • | | | | | | | | | | | | |
| Coulter Pine Forest | • | | | | | • | • | | | | | | • | | |
| Diablan Sage Scrub | | • | | • | • | • | | | • | | | • | • | | • |



Table 4.3-1 Natural Communities/Habitat Types and Potential/Known Occurrences within San Luis Obispo County Planning Areas

| Natural Communities/Habitat Types | Adelaida | El Pomar-Estrella | Estero | Huasna-Lopez | Las Pilitas | Los Padres | Nacimiento | North Coast | Salinas River | San Luis Bay Coastal | San Luis Bay Inland | San Luis Obispo | Shandon-Carrizo | South County Coastal | South County Inland |
|---|----------|-------------------|--------|--------------|-------------|------------|------------|-------------|---------------|----------------------|---------------------|-----------------|-----------------|----------------------|---------------------|
| Dry Salt Flat ² | | | | | | | | | | | | | • | | |
| Dryland Grain Crops ² | | | | | | | | | | | | | • | | |
| Foothill Pine-Oak Woodlands | • | • | | • | • | • | • | • | • | | | | • | | |
| Great Valley Cottonwood Riparian Forest | | | | | | | | | | | | | • | | |
| Interior Coast Range Saltbrush Scrub | | | | | | | | | | | | | • | | |
| Juniper-Oak Cismontane Woodland | | | | | | | | | | | | | • | | |
| Leather Oak Chaparral | | | | | | | • | | • | | | • | | | |
| Mixed Evergreen Forest | • | | | | | • | • | • | • | | | • | | | |
| Mixed Serpentine Chaparral | • | | | | | | • | • | • | | • | • | | | |
| Mojavean Pinyon and Juniper Woodlands | | | | | | | | | | | | | • | | |
| Monterey Pine Forest ¹ | | | | | | | | • | | | | | | | |
| Mule Fat Scrub | | | | • | | | | | | | | | | • | • |
| Non-Native Grassland | • | • | • | • | • | • | • | • | • | • | • | • | • | | • |
| Northern Coastal Salt Marsh ¹ | | | • | | | | | | | | | | | | |
| Northern Claypan Vernal Pool ¹ | | | | | | | | | | | | | • | | |
| Northern Interior Cypress Forest ¹ | | | | | | | | | • | | | • | | | |
| Open Foothill Pine Forest | • | • | | | • | • | • | | | | | | • | | |
| Orchard or Vineyard ² | • | • | | | | | | | • | | | | • | | |
| Permanently-flooded Lacustrine Habitat | • | | • | • | • | | • | | | | | • | | | • |
| Red Shank Chaparral | • | | | | | | | | | | | | | | |
| Sandy Area Other than Beaches ² | | • | | | | | | | • | | | | | • | |
| Semi-Desert Chaparral | | | | • | | • | | | | | | | • | | |
| Serpentine Bunchgrass ¹ | | | | | | | | | | | | • | | | |
| Serpentine Foothill Pine-Chaparral Woodlands | | | | | | | | | • | | | | | | |



Table 4.3-1 Natural Communities/Habitat Types and Potential/Known Occurrences within San Luis Obispo County Planning Areas

| Natural Communities/Habitat Types | Adelaida | El Pomar-Estrella | Estero | Huasna-Lopez | Las Pilitas | Los Padres | Nacimiento | North Coast | Salinas River | San Luis Bay Coastal | San Luis Bay Inland | San Luis Obispo | Shandon-Carrizo | South County Coastal | South County Inland |
|---|----------|-------------------|--------|--------------|-------------|------------|------------|-------------|---------------|----------------------|---------------------|-----------------|-----------------|----------------------|---------------------|
| Upper Sonoran Subshrub Scrub | | | | | | | | | | | | | • | | |
| Urban or Built-up Land ² | • | • | • | | | | | • | • | • | • | • | • | | • |
| Valley Needlegrass Grassland ¹ | | | • | | | | | | | | • | | | | |
| Valley Oak Woodland ¹ | • | | | | • | | • | | • | | | | | | |
| Valley Saltbush Scrub | | | | | | | | | | | | | • | | |
| Valley Sink Scrub ¹ | | | | | | | | | | | | | • | | |
| Venturan Coastal Sage Scrub | • | | • | • | | • | | | | | | • | • | | • |

Source:

CNDDB (database queried on July 30, 2009)

Notes:



¹ CNDDB Communities
² Habitat Type Provided by the County and not included in Holland 1986

Plants of California, Sixth Edition (Tibor, 2001) as updated online. Those plants contained on CNPS lists 1B and 2 are considered special status species in this EIR.

It should be noted that this mapping is primarily based on CNDDB species accounts that are submitted to the state by qualified individuals (e.g., biologists). Such accounts are typically generated where development is proposed. Therefore, areas that have little development and few accounts may have a greater diversity than what is indicated.

<u>Special-Status Plants.</u> Based on information obtained by the review of existing literature and a search of the CNDDB, a total of 125 special-status plant species were identified as having the potential to occur within the County. Table 4.3-2 lists each sensitive plant species that has the potential to occur or is known to occur within the County, including the name and legal status of these species organized by planning area.

Special-Status Wildlife. The CNDDB recognizes 79 wildlife species within the County. Based on information obtained by the review of existing literature, a search of the CNDDB, and analysis of the habitat types present, a total of 79 special-status animal species were identified as potentially occurring within the County. Table 4.3-3 provides a listing of each sensitive wildlife species that has the potential to occur or is known to occur within the County, including the name and legal status of these species organized by planning area.

d. Wildlife Movement Corridors. Wildlife movement corridors occur between different plant communities and between similar plant communities that are non-contiguous. As new development is proposed, retaining these corridors will allow species to travel between different habitats and provide for physical and genetic exchange between animal populations. Migration corridors provide critical linkages between what has or may become larger "islands" of intact native vegetation. Drainage courses, such as the Salinas River, and adjacent upland habitat typically function as migration corridors providing water and cover for animals.

Functioning migration corridors occur at various scales. The Salinas River, for example, is a large scale corridor that has an obvious tree and shrub lined corridor. Smaller scale functioning corridors exist as intermittent drainage channels and small patches of narrow vegetation. Both small and large scale corridors are important to protect and enhance.

e. Regulatory Setting. Regulatory authority over biological resources is shared by federal, state, and local authorities under a variety of statutes and guidelines. Primary authority for general biological resources lies within the land use control and planning authority of local jurisdictions, in this instance, the County of San Luis Obispo. The CDFG is a trustee agency for biological resources throughout the state under CEQA and also has direct jurisdiction under the California Fish and Game Code (CFGC). Under the state and federal Endangered Species Acts, the CDFG and the USFWS also have direct regulatory authority over species formally listed as Threatened or Endangered. Section 3503 of the CFGC prohibits the take, possession, or needless destruction of birds, their nests, or eggs. Additionally, Section 3503.5 of the CFGC protects birds of prey, their nests and eggs against take, possession, or destruction. Potential nesting and roosting sites for birds-of-prey and other migratory birds are also protected by the Migratory Bird Treaty Act (MBTA). Abiding by the



Table 4.3-2 Sensitive Plant Species Potential/Known Occurrences Within San Luis Obispo County

| Scientific Name | Common Name | Federal/State/CNPS/CDF G | Adelaida | El Pomar-Estrella | Estero | Huasna-Lopez | Las Pilitas | Los Padres | Nacimiento | North Coast | Salinas River | San Luis Bay Coastal | San Luis Bay Inland | San Luis Obispo | Shandon-Carrizo | South County Coastal | South County Inland |
|--|--------------------------------|-----------------------------|----------|-------------------|--------|--------------|-------------|------------|------------|-------------|---------------|----------------------|---------------------|-----------------|-----------------|----------------------|---------------------|
| Abies bracteata | bristlecone fir | none/none/1B.3/S2.3 | | | | | | | • | • | | | | | | | <u> </u> |
| Agrostis hooveri | Hoover's bent grass | none/none/1B.2/S2.2 | | | | | • | • | | | | • | • | | | | • |
| Allium hickmanii | Hickman's onion | none/none/1B.2/S2.2 | | | | | | | | • | | | | | | | <u> </u> |
| Allium howellii var. clokeyi | Mt. Pinos onion | none/none/1B.3/S2.3 | | | | | | • | | | | | | | • | | |
| Antirrhinum ovatum | oval-leaved snapdragon | none/none/4.2/S3.2 | | • | | | | | | | • | | | | • | | |
| Arctostaphylos cruzensis | Arroyo de la Cruz manzanita | none/none/1B.2/S2.2 | • | | • | | | | • | • | | • | • | • | | | |
| Arctostaphylos hookeri ssp. hearstiorum | Hearst's manzanita | none/E/1B.2/S1.2 | | | | | | | | • | | | | | | | |
| Arctostaphylos luciana | Santa Lucia manzanita | none/none/1B.2/S2.2 | • | | • | | | • | | | • | | | • | | | |
| Arctostaphylos montereyensis | Monterey manzanita | none/none/1B.2/S2.1 | | | | | | | • | | | | | | | | |
| Arctostaphylos morroensis | Morro manzanita | T/none/1B.1/S2.2 | | | • | | | | | | | | • | • | | | |
| Arctostaphylos osoensis | Oso manzanita | none/none/1B.2/S1.2 | | | • | | | | | | | | | | | | |
| Arctostaphylos pechoensis | Pecho manzanita | none/none/1B.2/S2.2 | • | | • | | | • | | | | • | • | • | | | |
| Arctostaphylos pilosula | Santa Margarita manzanita | none/none/1B.2/S2.2 | • | | | • | • | • | • | | • | | • | • | | | |
| Arctostaphylos rudis | sand mesa manzanita | none/none/1B.2/S2.2 | | | | | | | | | | | | | | | • |
| Arctostaphylos tomentosa ssp. daciticola | dacite manzanita | none/none/1B.1/S1.1 | | | • | | | | | | | | | | | | |
| Arctostaphylos wellsii | Wells's manzanita | none/none/1B.1/S2.1 | | | | • | | | | | • | • | • | • | | | • |
| Arenaria paludicola | marsh sandwort | E/E/1B.1/S1.1 | | | • | | | | | | | • | • | | | • | • |



Table 4.3-2 Sensitive Plant Species Potential/Known Occurrences Within San Luis Obispo County

| Scientific Name | Common Name | Federal/State/CNPS/CDF G | Adelaida | El Pomar-Estrella | Estero | Huasna-Lopez | Las Pilitas | Los Padres | Nacimiento | North Coast | Salinas River | San Luis Bay Coastal | San Luis Bay Inland | San Luis Obispo | Shandon-Carrizo | South County Coastal | South County Inland |
|---|------------------------------------|-----------------------------|----------|-------------------|--------|--------------|-------------|------------|------------|-------------|---------------|----------------------|---------------------|-----------------|-----------------|----------------------|---------------------|
| Aristocapsa insignis | Indian Valley spineflower | none/none/1B.2/S2.2 | | | | | | • | | | | | | | • | | |
| Astragalus didymocarpus var. milesianus | Miles's milk-vetch | none/none/1B.2/S2.2 | • | • | • | • | | | | | • | | | • | | | • |
| Atriplex cordulata | heartscale | none/none/1B.2/S2.2 | | | | | | | | | | | | | • | | |
| Atriplex coulteri | Coulter's saltbush | None/none/1B.2/S2.2 | | | | | | | | | | • | | | | | |
| Atriplex joaquiniana | San Joaquin spearscale | none/none/1B.2/S2.1 | | | • | | | | | | | | | | | | |
| Atriplex serenana var. davidsonii | Davidson's saltscale | none/none/1B.2/S2 | | | | | | | | | | | | | | • | • |
| Atriplex vallicola | Lost Hills crownscale | none/none/1B.2/S1.1 | | | | | | | | | | | | | • | | |
| Baccharis plummerae ssp. glabrata | San Simeon baccharis | none/none/1B.2/S1.2 | • | | | | | | | • | | | | | | | |
| Blepharizonia plumosa | big tarplant | none/none/1B.1/S1.1 | | | | | | | | | | | | | • | | |
| Bloomeria humilis | dwarf goldenstar | none/R/1B.2/S1.1 | | | | | | | | • | | | | | | | |
| California macrophylla | round-leaved filaree | none/none/1B.1/S3.1 | | • | | | | • | • | | • | | | | • | | |
| Calochortus clavatus var. recurvifolius | Arroyo de la Cruz mariposa lily | none/none/1B.2/S1.2 | | | | | | | | • | | | | • | | | |
| Calochortus obispoensis | San Luis mariposa lily | none/none/1B.2/S2.1 | | | • | | | | | • | • | | • | • | | | |
| Calochortus palmeri var. palmeri | Palmer's mariposa lily | none/none/1B.2/S2.1 | | | | • | | • | | | | | | | | | |
| Calochortus simulans | San Luis Obispo mariposa lily | none/none/1B.3/S2.3 | | • | | | • | • | | | • | | • | • | • | | |
| Calochortus weedii var. vestus | late-flowered mariposa lily | none/none/1B.2/S2.2 | | | | | | • | | • | | | | | • | | |
| Calycadenia villosa | dwarf calycadenia | none/none/1B.1/S2.1 | • | • | | | | • | • | | | | | | • | | |



Table 4.3-2 Sensitive Plant Species Potential/Known Occurrences Within San Luis Obispo County

| Scientific Name | Common Name | Federal/State/CNPS/CDF G | Adelaida | El Pomar-Estrella | Estero | Huasna-Lopez | Las Pilitas | Los Padres | Nacimiento | North Coast | Salinas River | San Luis Bay Coastal | San Luis Bay Inland | San Luis Obispo | Shandon-Carrizo | South County Coastal | South County Inland |
|--|--------------------------------|-----------------------------|----------|-------------------|--------|--------------|-------------|------------|------------|-------------|---------------|----------------------|---------------------|-----------------|-----------------|----------------------|---------------------|
| Calyptridium parryi var. hesseae | Santa Cruz Mountains pussypaws | none/none/1B.1/S2 | • | | | | | | | | | | | | | | |
| Calystegia subacaulis ssp. episcopalis | Cambria morning- glory | none/none/1B.2/S1.2 | | | • | | | | | • | • | | • | • | | | |
| Camissonia hardhamiae | Hardham's evening- primrose | none/none/1B.2/S1.2 | | • | | | • | | | | • | | | | • | | |
| Carex obispoensis | San Luis Obispo sedge | none/none/1B.2/S2.2 | • | | • | | • | • | • | • | • | | | • | | | |
| Castilleja densiflora ssp. obispoensis | Obispo Indian paintbrush | none/none/1B.2/S2.2 | • | | • | | | | | • | • | • | • | • | | | |
| Caulanthus californicus | California jewel- flower | E/E/1B.1/S1.1 | | | | | | | | | | | | | • | | |
| Caulanthus coulteri var. lemmonii | Lemmon's jewelflower | none/none/1B.2/S2.2 | • | | | | | • | • | | • | | | | • | | |
| Ceanothus hearstiorum | Hearst's ceanothus | none/R/1B.2/S1.2 | | | | | | | | • | | | | | | | |
| Ceanothus maritimus | maritime ceanothus | none/R/1B.2/S2.2 | | | | | | | | • | | | | | | | |
| Centromadia parryi ssp. congdonii | Congdon's tarplant | none/none/1B.2/S3.2 | | | • | | | | | | | | | • | | | |
| Chlorogalum pomeridianum var. minus | dwarf soaproot | none/none/1B.2/S1.2 | | | | | | | | | • | | | • | | | |
| Chlorogalum purpureum var. purpureum | purple amole | T/none/1B.1/S1.1 | • | | | | | | | | | | | | | | |
| Chlorogalum purpureum var. reductum | Camatta Canyon amole | T/R/1B.1/S1.1 | | | | | | • | | | | | | | • | | |
| Chorizanthe breweri | Brewer's spineflower | none/none/1B.3/S2.2 | | | • | | | | | • | • | | • | • | | | |
| Chorizanthe pungens var. pungens | Monterey spineflower | T/none/1B.2/S2.2 | | | | | | | | • | | | | | | | |
| Chorizanthe rectispina | straight-awned spineflower | none/none/1B.3/S1.2 | • | • | | | • | • | | | • | | • | | • | | |



Table 4.3-2 Sensitive Plant Species Potential/Known Occurrences Within San Luis Obispo County

| Scientific Name | Common Name | Federal/State/CNPS/CDF G | Adelaida | El Pomar-Estrella | Estero | Huasna-Lopez | Las Pilitas | Los Padres | Nacimiento | North Coast | Salinas River | San Luis Bay Coastal | San Luis Bay Inland | San Luis Obispo | Shandon-Carrizo | South County Coastal | South County Inland |
|---------------------------------------|------------------------------------|-----------------------------|----------|-------------------|--------|--------------|-------------|------------|------------|-------------|---------------|----------------------|---------------------|-----------------|-----------------|----------------------|---------------------|
| Cirsium fontinale var. obispoense | Chorro Creek bog thistle | E/E/1B.2/S1.2 | • | | | | | • | | • | • | | | • | | | |
| Cirsium Ioncholepis | La Graciosa thistle | E/T/1B.1/S2.2 | | | | | | | | | | • | • | • | | • | |
| Cirsium occidentale var. compactum | compact cobwebby thistle | none/none/1B.2/S2.1 | | | • | | | | | • | | | | | | | |
| Cirsium rhothophilum | Surf thistle | none/T/1B.2/S2.2 | | | | | | | | | | • | • | | | • | |
| Cladium californicum | California saw-grass | None/none/2.2/S2.2 | | | | | | | | | | | | | | • | • |
| Cladonia firma | firm cup lichen | none/none/S1.1 | | | • | | | | | | | | | | | | |
| Clarkia speciosa ssp. immaculata | Pismo clarkia | E/R/1B.1/S1.1 | | | | | | | | | | | • | • | | | • |
| Cordylanthus maritimus ssp. maritimus | salt marsh bird's- beak | E/E/1B.2/S2.1 | | | • | | | | | | | | | | | | |
| Deinandra halliana | Hall's tarplant | none/none/1B.1/S1.1 | | | | | | | | | | | • | | • | | |
| Deinandra increscens ssp. foliosa | leafy tarplant | none/none/1B.2/S2.2 | | | | • | • | • | | • | | | • | • | | | |
| Delphinium parryi ssp. blochmaniae | dune larkspur | none/none/1B.2/S2.2 | | | | | | • | | | | | | • | | • | • |
| Delphinium recurvatum | recurved larkspur | none/none/1B.2/S2.2 | | | | | | | | | | | | | • | | |
| Delphinium umbraculorum | umbrella larkspur | none/none/1B.3/S2,S3.3 | • | | | • | | • | | | | | | | • | | |
| Dithyrea maritima | beach spectaclepod | none/T/1B.1/S2.1 | | | • | | | | | | | • | • | | | • | |
| Dudleya abramsii ssp. bettinae | San Luis Obispo serpentine dudleya | none/none/1B.2/S1.2 | • | | • | | | | | | | | | • | | | |
| Dudleya abramsii ssp. murina | San Luis Obispo dudleya | none/none/1B.3/S2.3 | | | • | | | | | | | | • | • | | | |
| Dudleya blochmaniae ssp. blochmaniae | Blochman's dudleya | none/none/1B.1/S2.1 | • | | • | | | | | • | | | | • | | | |
| Entosthodon kochii | Koch's cord-moss | none/none/1B.3/S1.3 | • | | | | | | | | | | | | | | |



Table 4.3-2 Sensitive Plant Species Potential/Known Occurrences Within San Luis Obispo County

| Scientific Name | Common Name | Federal/State/CNPS/CDF G | Adelaida | El Pomar-Estrella | Estero | Huasna-Lopez | Las Pilitas | Los Padres | Nacimiento | North Coast | Salinas River | San Luis Bay Coastal | San Luis Bay Inland | San Luis Obispo | Shandon-Carrizo | South County Coastal | South County Inland |
|--------------------------------------|-------------------------------------|-----------------------------|----------|-------------------|--------|--------------|-------------|------------|------------|-------------|---------------|----------------------|---------------------|-----------------|-----------------|----------------------|---------------------|
| Eriastrum hooveri | Hoover's eriastrum | delisted/none/4.2/S3.2 | | | | | | | | | | | | | • | | |
| Eriastrum luteum | yellow-flowered eriastrum | none/none/1B.2/S2.2 | • | • | | | • | • | • | | • | | | | • | | |
| Erigeron blochmaniae | Blochman's leafy daisy | none/none/1B.2/S2.2 | | | • | | | | | | | • | • | | | • | • |
| Eriodictyon altissimum | Indian Knob mountainbalm | E/E/1B.1/S2.2 | | | • | | | | | | | | • | | | | |
| Eriogonum temblorense | Temblor buckwheat | none/none/1B.2/S2.2 | | | | | | | | | | | | | • | | |
| Eryngium aristulatum var. hooveri | Hoover's button- celery | none/none/1B.1/S2.1 | | | | | | | | • | | | | • | | | |
| Eschscholzia rhombipetala | diamond-petaled California poppy | none/none/1B.1/S1.1 | | | | | | | | | | | | | • | | |
| Fritillaria agrestis | stinkbells | None/none/4.2/S3.2 | | | | | | | | | | | | | • | | |
| Fritillaria ojaiensis | Ojai fritillary | none/none/1B.2/S1.2 | | | | | | • | | | | | | | | | |
| Fritillaria viridea | San Benito fritillary | none/none/1B.2/S3.2 | | | • | | | | | | • | | | • | | | |
| Galium californicum ssp. luciense | Cone Peak bedstraw | None/none/1B.3/S2.3 | | | | | | | | • | | | | | | | |
| Galium hardhamiae | Hardham's bedstraw | none/none/1B.3/S2.3 | • | | | | | | • | | | | | | | | |
| Horkelia cuneata ssp. puberula | mesa horkelia | none/none/1B.1/S2.1 | | • | | | | | | • | • | • | • | • | | | |
| Horkelia cuneata ssp. sericea | Kellogg's horkelia | none/none/1B.1/S1.1 | | | | | | | | • | • | | | | | • | • |
| Juncus luciensis | Santa Lucia dwarf rush | None/none/B1.2/S3 | • | • | | | | | | | | | | | | | |
| Lasthenia glabrata ssp. coulteri | Coulter's goldfields | none/none/1B.1/S2.1 | | | • | | | | | • | | | | | • | | |
| Lasthenia macrantha ssp. macrantha | perennial goldfields | none/none/1B.2/S2.2 | | | | | | | | | | | | | | | |



Table 4.3-2 Sensitive Plant Species Potential/Known Occurrences Within San Luis Obispo County

| Scientific Name | Common Name | Federal/State/CNPS/CDF G | Adelaida | El Pomar-Estrella | Estero | Huasna-Lopez | Las Pilitas | Los Padres | Nacimiento | North Coast | Salinas River | San Luis Bay Coastal | San Luis Bay Inland | San Luis Obispo | Shandon-Carrizo | South County Coastal | South County Inland |
|---|----------------------------------|-----------------------------|----------|-------------------|--------|--------------|-------------|------------|------------|-------------|---------------|----------------------|---------------------|-----------------|-----------------|----------------------|---------------------|
| Layia heterotricha | pale-yellow layia | none/none/1B.1/S1.1 | • | | | | • | | • | | | | | | • | | |
| Layia jonesii | Jones's layia | none/none/1B.2/S1.1 | • | | • | | | | | | | • | • | • | • | | |
| Layia munzii | Munz's tidy-tips | none/none/1B.2/S1.1 | | | | | | | | | | | | | • | | |
| Lepidium jaredii ssp. album | Panoche pepper- grass | none/none/1B.2/S1.2 | | | | | | | | | | | | | • | | |
| Lepidium jaredii ssp. jaredii | Jared's pepper-grass | none/none/1B.2/S1.2 | | • | | | | | | | • | | | | • | | |
| Lupinus Iudovicianus | San Luis Obispo County lupine | none/none/1B.2/S2.2 | | | | • | • | | | | • | | • | | | | |
| Lupinus nipomensis | Nipomo Mesa Iupine | E/E/1B.1/S1.1 | | | | | | | | | | | | | | • | • |
| Madia radiate | showy madia | none/none/1B.1/S2.1 | | | | | | • | | | | | | | • | | |
| Malacothamnus davidsonii | Davidson's bush mallow | none/none/1B.2/S1.1 | | | | | | | • | | | | | | | | |
| Malacothamnus palmeri var. involucratus | Carmel Valley bush mallow | none/none/1B.2/S2.2 | • | | | | | | | • | • | | | | | | |
| Malacothamnus palmeri var. palmeri | Santa Lucia bush mallow | none/none/1B.2/S2.2 | • | | | | | | | • | • | | | | | | |
| Malacothrix saxatilis var. arachnoidea | Carmel Valley malacothrix | none/none/1B.2/S2.2 | • | | | | | | | | | | | | | | |
| Microseris paludosa | marsh microseris | none/none/1B.2/S2.2 | | | | | | | | • | | | | | | | |
| Monardella crispa | crisp monardella | none/none/1B.2/S2.2 | | | • | | | | | | | • | | | | • | • |
| Monardella frutescens | San Luis Obispo monardella | none/none/1B.2/S2.2 | | | • | | | | | | | • | • | | | • | • |
| Monardella palmeri | Palmer's monardella | none/none/1B.2/S2.2 | | | • | | • | | • | • | • | | | • | | | |
| Monolopia congdonii | San Joaquin woollythreads | E/none/1B.2/S3.2 | | | | | | | | | | | | | • | | |
| Nasturtium gambelii | Gambel's water cress | E/T/1B.1/S1.1 | | | | | | | | | | | | | | • | • |



Table 4.3-2 Sensitive Plant Species Potential/Known Occurrences Within San Luis Obispo County

| Scientific Name | Common Name | Federal/State/CNPS/CDF G | Adelaida | El Pomar-Estrella | Estero | Huasna-Lopez | Las Pilitas | Los Padres | Nacimiento | North Coast | Salinas River | San Luis Bay Coastal | San Luis Bay Inland | San Luis Obispo | Shandon-Carrizo | South County Coastal | South County Inland |
|---------------------------------------|---------------------------------|-----------------------------|----------|-------------------|--------|--------------|-------------|------------|------------|-------------|---------------|----------------------|---------------------|-----------------|-----------------|----------------------|---------------------|
| Navarretia fossalis | Moran's navarretia | T/none/1B.1/S2.1 | | • | | | | | | | | | | | | | |
| Navarretia nigelliformis ssp. radians | shining navarretia | none/none/1B.2/S1.1 | • | • | | | | | | | • | | | | • | | |
| Navarretia prostrata | prostrate navarretia | none/none/1B.1/S2.1 | • | | | | | | | | | | | | | | |
| Orobanche parishii ssp. brachyloba | short-lobed broomrape | None/none/4.2/S3.2 | | | | | | | | | | | | | | • | |
| Pedicularis dudleyi | Dudley's lousewort | none/R/1B.2/S2.2 | | | | | | | | • | | | | | | | |
| Pinus radiate | Monterey pine | none/none/1B.1/S1.1 | | | | | | | | • | | | | | | | |
| Plagiobothrys uncinatus | hooked popcorn- flower | none/none/1B.2/S2.2 | • | | | | • | | • | | • | | | | | | |
| Poa diaboli | Diablo Canyon blue grass | none/none/1B.2/S1.2 | | | | | | | | | | • | • | | | | |
| Sanicula maritima | adobe sanicle | none/R/1B.1/S2.2 | | | • | | | | | • | | | | • | | | |
| Scrophularia atrata | black-flowered figwort | none/none/1B.2/S2.2 | | | | | | | | | | • | • | | | | |
| Senecio aphanactis | rayless ragwort | none/none/2.2/S1.2 | | • | | | | • | | | | | | • | • | | |
| Sidalcea hickmanii ssp. anomala | Cuesta Pass checkerbloom | none/R/1B.2/S1.2 | | | | | | | | | • | | | • | | | |
| Sidalcea hickmanii ssp. Parishii | Parish's checkerbloom | C/R/1B.2/S1.2 | | | | | | • | | | | | | | | | |
| Streptanthus albidus ssp. peramoenus | most beautiful jewel- flower | none/none/1B.2/S2.2 | • | | • | | | | • | • | • | | • | • | | | |
| Stylocline masonii | Mason's neststraw | none/none/1B.1/S1.1 | | | | | | | | | | | | | • | | |
| Suaeda californica | California seablite | E/none/1B.1/S1.1 | | | • | | | | | | | | | | | | |
| Sulcaria isidiifera | splitting yarn lichen | none/none/S1.1 | | | • | | | | | | | | | | | | |
| Symphyotrichum defoliatum | San Bernardino aster | none/none/1B.2/S3.2 | | • | | | | | | | | • | • | | • | • | • |



Table 4.3-2 Sensitive Plant Species Potential/Known Occurrences Within San Luis Obispo County

| Scientific Name | Common Name | Federal/State/CNPS/CDF G | Adelaida | El Pomar-Estrella | Estero | Huasna-Lopez | Las Pilitas | Los Padres | Nacimiento | North Coast | Salinas River | San Luis Bay Coastal | San Luis Bay Inland | San Luis Obispo | Shandon-Carrizo | South County Coastal | South County Inland |
|---|--------------------------------|-----------------------------|----------|-------------------|--------|--------------|-------------|------------|------------|-------------|---------------|----------------------|---------------------|-----------------|-----------------|----------------------|---------------------|
| Trifolium depauperatum var. hydrophilum | saline clover | none/none1B.2/S2.2 | | | | | | | | | | | | • | | | |
| Triteleia ixioides ssp. Cookie | Cook's triteleia | none/none/1B.3/S2.3 | • | | | | | | • | • | | | | | | | |
| Tropidocarpum capparideum | caper-fruited tropidocarpum | none/none/1B.1/S1.1 | | | | | | | | | • | | | | | | |
| Viola aurea | golden violet | none/none/2.2/S2,S3 | | | | | | | | | | | • | | • | | |

Source:

CNDDB (database queried on July 30, 2009)

Notes:

Federal: **T** = threatened, **E** = endangered, **C** = candidate

State: T = threatened, E = endangered, R = rare

California Native Plant Society (CNPS):

List **1B** = rare, threatened, endangered, in California and elsewhere.

List **2** = rare, threatened, or endangered in California, but more common elsewhere.

- .1 Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)
- .2 Fairly endangered in California (20-80% occurrences threatened)
- .3 Not very endangered in California (<20% of occurrences threatened or no current threats known)

California Department of Fish and Game (CDFG):

S1 = Less than 6 viable Element Occurrences (Eos) or less than 1,000 individuals or less than 2,000 acres;

S1.1 = very threatened,

S1.2 =threatened,

\$1.3 = not very threatened or no current threats known.

S2 = 6-20 Eos or 1,000-3,000 individuals or 2,000-10,000 acres;

S2.1 = very threatened,

S2.2 = threatened.

\$2.3 = not very threatened or no current threats known.

S3 = 21-80 Eos or 3,000-10,000 individuals or 10,000-50,000 acres

S3.1 = very threatened,

S3.2 = threatened.

S3.3 = not very threatened or no current threats known.



Table 4.3-2 Sensitive Plant Species Potential/Known Occurrences Within San Luis Obispo County

| Scientific Name Common Name | Federal/State/CNPS/CDF G | Adelaida | ar-E | Estero | Huasna-Lopez | Las Pilitas | Los Padres | Nacimiento | North Coast | Salinas River | San Luis Bay Coastal | San Luis Bay Inland | San Luis Obispo | Shandon-Carrizo | South County Coastal | South County Inland | |
|-----------------------------|-----------------------------|----------|------|--------|--------------|-------------|------------|------------|-------------|---------------|----------------------|---------------------|-----------------|-----------------|----------------------|---------------------|--|
|-----------------------------|-----------------------------|----------|------|--------|--------------|-------------|------------|------------|-------------|---------------|----------------------|---------------------|-----------------|-----------------|----------------------|---------------------|--|



Table 4.3-3 Sensitive Animal Species Potential/Known Occurrences Within San Luis Obispo County

| Scientific Name | Common Name | Federal/State/CDF G | Adelaida | El Pomar-Estrella | Estero | Huasna-Lopez | Las Pilitas | Los Padres | Nacimiento | North Coast | Salinas River | San Luis Bay Coastal | San Luis Bay Inland | San Luis Obispo | Shandon-Carrizo | South County Coastal | South County Inland |
|----------------------------------|------------------------------|------------------------|----------|-------------------|--------|--------------|-------------|------------|------------|-------------|---------------|----------------------|---------------------|-----------------|-----------------|----------------------|---------------------|
| Ablautus schlingeri | Oso Flaco robber fly | none/none/S1 | | | | | | | | | | • | | | | • | |
| Accipiter cooperii | Cooper's hawk | none/none/SC | | | • | | • | • | • | | • | • | • | | • | • | |
| Accipiter striatus | sharp-shinned hawk | none/none/SC | | | | | | | | | | | | | | | • |
| Agelaius tricolor | tricolored blackbird | none/none/SC | | | | | | | | | | | | • | • | | |
| Ambystoma californiense | California tiger salamander | T/none/SC | | | | • | | • | | | | | | • | • | | • |
| Ammodramus savannarum | grasshopper sparrow | none/none/S2 | | | | | | | | • | • | | | | • | | |
| Ammospermophilus nelsoni | Nelson's antelope squirrel | none/T/none | | | | | | | | | | | | | • | | |
| Anniella pulchra nigra | black legless lizard | none/none/S2 | | | • | | | | | | | | | | | | |
| Anniella pulchra pulchra | silvery legless lizard | none/none/SC | | • | • | | | • | • | | • | | | | • | • | |
| Antrozous pallidus | pallid bat | none/none/SC | • | | • | | | | | • | • | | | • | • | | |
| Aquila chrysaetos | golden eagle | none/none/S3 | • | | | | | | | | • | | | | | | |
| Areniscythris brachypteris | Oso Flaco flightless moth | none/none/S1 | | | | | | | | | | | | | | • | |
| Asio otus | long-eared owl | none/none/SC | | | | | | | | | | | | | • | | |
| Athene cunicularia | burrowing owl | none/none/SC | • | | | | | | | | | | | • | • | • | |
| Branchinecta campestris | pocket pouch fairy shrimp | none/none/S1 | | | | | | | | | | | | | • | | |
| Branchinecta longiantenna | longhorn fairy shrimp | E/none/none | | | | | | | | | | | | | • | | |
| Branchinecta lynchi | vernal pool fairy shrimp | T/none/none | • | • | | | | • | | | • | | | • | • | | |
| Buteo regalis | ferruginous hawk | none/none/SC | • | | | | | | | • | • | | | • | | | |
| Charadrius alexandrinus nivosus | western snowy plover | T/none/SC | | | • | | | | | | | • | | | | • | |
| Charadrius montanus | mountain plover | none/none/SC | | | | | | | | | | | | | • | | |
| Chlosyne leanira elegans | Oso Flaco patch butterfly | none/none/S1S2 | | | | | | | | | | | | | | • | |
| Cicindela hirticollis gravida | sandy beach tiger beetle | none/none/S1 | | | • | | | | | | | • | | | | • | |
| Coccyzus americanus occidentalis | western yellow-billed cuckoo | C/E/none | | | | | | | | | | | | • | | | |



Table 4.3-3 Sensitive Animal Species Potential/Known Occurrences Within San Luis Obispo County

| Scientific Name | Common Name | Federal/State/CDF G | Adelaida | El Pomar-Estrella | Estero | Huasna-Lopez | Las Pilitas | Los Padres | Nacimiento | North Coast | Salinas River | San Luis Bay Coastal | San Luis Bay Inland | San Luis Obispo | Shandon-Carrizo | South County Coastal | South County Inland |
|--------------------------------------|----------------------------|------------------------|----------|-------------------|--------|--------------|-------------|------------|------------|-------------|---------------|----------------------|---------------------|-----------------|-----------------|----------------------|---------------------|
| Coelus globosus | globose dune beetle | none/none/none | | | • | | | | | | | | | | | | |
| Corynorhinus townsendii | Townsend's big-eared bat | none/none/SC | | | | | | | • | • | • | | | • | | | |
| Cypseloides niger | black swift | none/none/SC | | | | | | | | • | | | | | | | |
| Danaus plexippus | monarch butterfly | TP/none/none | • | | • | | | | | • | | • | • | • | | • | • |
| Dipodomys heermanni morroensis | Morro Bay kangaroo rat | E/E/none | | | • | | | | | | | | | | | | |
| Dipodomys ingens | giant kangaroo rat | E/E/none | | | | | | | | | | | | | • | | |
| Dipodomys nitratoides brevinasus | short-nosed kangaroo rat | none/none/S1S2 | | | | | | | | | | | | | • | | |
| Dipodomys nitratoides nitratoides | Tipton kangaroo rat | E/E/none | | | | | | | | | | | | | • | | |
| Elanus leucurus | white-tailed kite | none/none/S3 | | | | | | | | | • | | | • | | į | |
| Emys (=Clemmys) marmorata pallida | southwestern pond turtle | none/none/SC | • | • | • | • | • | • | • | • | • | • | • | • | • | • | |
| Eremophila alpestris actia | California horned lark | none/none/SC | | | | | | | | | | | | • | | | |
| Eucyclogobius newberryi | tidewater goby | E/none/SC | • | | • | | | | | • | | • | • | | | • | |
| Eumops perotis californicus | western mastiff bat | none/none/SC | | | | | | | | | | | | • | | | |
| Euphilotes enoptes smithi | Smith's blue butterfly | E/none/none | | | | | | | | • | | | | | | | |
| Euproserpinus euterpe | Kern primrose sphinx moth | T/none/S1 | | | | | | | | | | | | | • | | |
| Falco columbarius | merlin | none/none/S3 | | | | | | | | | • | | | | | | |
| Falco mexicanus | prairie falcon | none/none/S3 | • | | | • | • | • | • | | | | | | • | | |
| Gambelia sila | blunt-nosed leopard lizard | E/E/none | | | | | | | | | | | | | • | | |
| Gila orcuttii | arroyo chub | none/none/SC | | | | | | | | | | | | | | • | |
| Gymnogyps californianus | California condor | E/E/none | | | | • | | • | | | | | | | • | | |
| Haliaeetus leucocephalus | bald eagle | T/E/none | • | | | | | | • | | | | | | | | |



Table 4.3-3 Sensitive Animal Species Potential/Known Occurrences Within San Luis Obispo County

| Scientific Name | Common Name | Federal/State/CDF G | Adelaida | El Pomar-Estrella | Estero | Huasna-Lopez | Las Pilitas | Los Padres | Nacimiento | North Coast | Salinas River | San Luis Bay Coastal | San Luis Bay Inland | San Luis Obispo | Shandon-Carrizo | South County Coastal | South County Inland |
|-------------------------------------|---|------------------------|----------|-------------------|--------|--------------|-------------|------------|------------|-------------|---------------|----------------------|---------------------|-----------------|-----------------|----------------------|---------------------|
| Helminthoglypta walkeriana | Morro shoulderband (=banded dune) snail | E/none/none | | | • | | | | | | | | • | | | | |
| Lasiurus blossevillii | western red bat | none/none/S3? | | | | | • | | | | | | | | | | |
| Lasiurus cinereus | hoary bat | none/none/s4 | • | | | | | | | | | | | | | | |
| Laterallus jamaicensis coturniculus | California black rail | none/T/none | | | • | | | | | | | | | | | • | |
| Lichnanthe albipilosa | white sand bear scarab beetle | none/none/S1 | | | | | | | | | | | | | | • | |
| Linderiella occidentalis | California linderiella | none/none/S2S3 | | | | | | | | | • | | | • | | | |
| Lytta morrisoni | Morrison's blister beetle | none/none/S1S2 | | | | | | | | | | | | | • | | |
| Masticophis flagellum ruddocki | San Joaquin whipsnake | none/none/SC | | | | | | | | | | | | | • | | |
| Myotis thysanodes | fringed myotis | none/none/S4 | | | | | | | | • | | | | | | | |
| Myotis volans | long-legged myotis | none/none/S4? | | | | | | | | • | | | | | | | |
| Myotis yumanensis | Yuma myotis | none/none/S4? | | | | | • | | | • | | | | | | | |
| Neotoma lepida intermedia | San Diego desert woodrat | none/none/SC | | | • | | | | | | | • | • | | | | |
| Neotoma macrotis luciana | Monterey dusky-footed woodrat | none/none/SC | • | | | | | | | | | | | | | | |
| Nyctinomops macrotis | big free -tailed bat | none/none/SC | | | • | | | | | | | | | | | | |
| Oncorhynchus mykiss irideus | steelhead - south/central California coast esu | T/none/none | • | | • | • | | | • | • | • | • | • | • | | • | |
| Onychomys torridus tularensis | Tulare grasshopper mouse | none/none/SC | | | | | | | | | | | | | • | | |
| Perognathus inornatus inornatus | San Joaquin pocket mouse | none/none/S2S3 | • | | | | | | | | • | | | | • | | |
| Perognathus inornatus psammophilus | Salinas pocket mouse | none/none/SC | • | | | | | | | | • | | | | | | |



Table 4.3-3 Sensitive Animal Species Potential/Known Occurrences Within San Luis Obispo County

| Scientific Name | Common Name | Federal/State/CDF G | Adelaida | El Pomar-Estrella | Estero | Huasna-Lopez | Las Pilitas | Los Padres | Nacimiento | North Coast | Salinas River | San Luis Bay Coastal | San Luis Bay Inland | San Luis Obispo | Shandon-Carrizo | South County Coastal | South County Inland |
|--|---|------------------------|----------|-------------------|--------|--------------|-------------|------------|------------|-------------|---------------|----------------------|---------------------|-----------------|-----------------|----------------------|---------------------|
| Phrynosoma coronatum (frontale population) | Coast (California) horned lizard | none/none/SC | | | • | | | | | | | | • | • | • | | |
| Plebejus icarioides moroensis | Morro Bay blue butterfly | none/none/S1S3 | | | • | | | | | | | | | | | • | |
| Polyphylla nubila | Atascadero June beetle | none/none/S1 | | | | | | | | | • | | | • | | | |
| Progne subis | purple martin | none/none/SC | | | | | | | | | • | | | | | | |
| Protodufourea zavortinki | Zavortink's protodufourea bee | none/none/S1 | | | | | | | | | | | | | • | | |
| Pyrgulopsis taylori | San Luis Obispo pyrg | none/none/S1 | | | • | | | • | | | • | | | • | | | |
| Rallus longirostris obsoletus | California clapper rail | E/E/none | | | • | | | | | | | | | | | | |
| Rana aurora draytonii | California red-legged frog | T/none/SC | • | | • | • | | • | | • | • | • | • | • | • | • | • |
| Rana boylii | foothill yellow-legged frog | none/none/SC | | | | | | | | • | | | | | | | |
| Spea (=Scaphiopus) hammondii | western spadefoot | none/none/SC | • | • | | | • | • | | | • | | | | • | | • |
| Sterna antillarum browni | California least tern | E/E/none | | | | | | | | | | | | | | • | |
| Taricha torosa torosa | Coast Range newt | none/none/SC | • | | | • | | | | • | • | | | | | | |
| Taxidea taxus | American badger | none/none/SC | • | • | • | • | | • | | | • | | • | • | • | • | • |
| Thamnophis hammondii | two-striped garter snake | none/none/SC | • | | | • | | • | | • | | | | | | • | |
| Trimerotropis occulens | Lompoc grasshopper | none/none/none | | | | | | | | | • | | | | | | |
| Tryonia imitator | mimic tryonia (=California brackishwater snail) | none/none/none | | | • | | | | | | | • | | | | • | |
| Vulpes macrotis mutica | San Joaquin kit fox | E/T/none | • | • | | | | • | | | • | | | | • | | |

Source:

CNDDB (database queried on July 30, 2009)

Notes:

Federal: C = candidate, T = threatened, E = endangered



Table 4.3-3 Sensitive Animal Species Potential/Known Occurrences Within San Luis Obispo County

State: T = threatened, E = endangered

California Department of Fish and Game (CDFG):

SC = Species of Concern

S1 = Less than 6 viable Element Occurrences (Eos) or less than 1,000 individuals or less than 2,000 acres;

S1.1 = very threatened,

S1.2 = threatened,

\$1.3 = not very threatened or no current threats known.

S2 = 6-20 Eos or 1,000-3,000 individuals or 2,000-10,000 acres;

S2.1 = very threatened,

S2.2 = threatened,

\$2.3 = not very threatened or no current threats known.

S3 = 21-80 Eos or 3,000-10,000 individuals or 10,000-50,000 acres

S3.1 = very threatened,

S3.2 = threatened,

S3.3 = not very threatened or no current threats known.



CFGC and the MBTA usually means avoiding removal of trees with active nests or disturbance of the nests until such time as the adults and young are no longer reliant on the nest site. The provision also includes any disturbance that causes a nest to fail and/or a loss of reproductive effort.

<u>USFWS Permitting Process</u>. Pursuant to the Federal Endangered Species Act (FESA), a permit from USFWS is required for take of a federally listed species through either the FESA Section 7 or Section 10 process.

Clean Water Act. Wetlands are protected on a federal, state, and local level. Wetland and riparian communities may be subject to Army Corps of Engineers jurisdiction as waters of the U.S. pursuant to Section 404 of the federal Clean Water Act. Protection for wetlands and riparian habitat is also afforded through the CFGC and the state Clean Water Act (Porter-Cologne Act), the latter administered by the RWQCB. Corps permits for discharges of dredged or fill material into wetlands and waters also requires a CWA Section 401 water quality certification from the RWQCB. Any activity that would remove or otherwise alter wetland and riparian habitat types is closely scrutinized by the regulatory agencies through the CEQA review process and then later through the CDFG and Corps permitting processes.

4.3.2. Impact Analysis

a. Methodology and Significance Thresholds. This impact assessment focuses on identifying potential project-related impacts associated with implementation of the proposed Grading and Stormwater Management Ordinances which focuses on future grading and site development, and is based on details presented within the project description (refer to Section 2.0). Where potential project related impacts to sensitive resources have been identified, measures for avoiding or minimizing adverse effects to these resources have been recommended.

Impacts to biological resources within the study area have been evaluated by determining the sensitivity, significance, or rarity of each resource that will be adversely affected by the proposed project, and thresholds of significance have been applied to determine if the impact constitutes a significant impact. The significance threshold may be different for each habitat or species and is based on the resource's rarity or sensitivity and the level of impact that would result from the proposed project.

According to the State CEQA Guidelines it is assumed that the proposed project would result in a significant impact if it would:

- Have a substantial adverse impact, either directly or through habitat modifications, any endangered, rare, or threatened species, as listed in Title 14 of the California Code of Regulations (§670.2 or 670.5) or in Title 50, Code of Federal Regulations (§17.11 or 17.12);
- Have a substantial adverse impact, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;



- Have a substantial adverse impact on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service;
- Adversely impact federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) either individually or in combination with the known or probable impacts of other activities through direct removal, filling, hydrological interruption, or other means;
- Interfere substantially with the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan.

Additionally, the County of San Luis Obispo has established local thresholds pertaining to biological resources. Impacts would be significant if development resulting from the project would do any of the following:

- Result in a loss of unique or special status species or their habitats;
- Reduce the extent, diversity or quality of native or other important vegetation;
- Impact wetland or riparian habitat;
- Introduce barriers to movement of resident or migratory fish or wildlife species, or factors, which could hinder the normal activities of wildlife.

b. Project Impacts and Mitigation Measures.

Impact B-1 Future grading and site development in accordance with the Grading and Stormwater Management Ordinances could permanently remove sensitive habitat areas. This is a Class II, significant but mitigable, impact.

The proposed Grading and Stormwater Management Ordinances are intended to strengthen protections on illicit discharges from construction sites and post-construction discharges for specific uses. These revisions will require additional facilities to handle and treat stormwater, for certain types of projects. Additionally, the ordinance will require consistency with Low Impact Development (LID) practices which are to be established by the County. Drainage facilities, such as basins and concrete drains, and LID practices could impact sensitive habitat areas of the County.

Sensitive habitats are those that are protected or otherwise considered sensitive because of declining acreage by the County, CDFG, RWQCB, and the Corps under CEQA, CWA, and CDFG code. These include CDFG designated plant communities of special concern, wetland and riparian habitats, and waters of the U.S. and State. In addition, sensitive habitats occupied by federally-listed species are also protected by the USFWS under FESA. These habitat types are included in the California Natural Diversity Database (CNDDB) as rare plant communities, because their distribution in the state of California has been greatly reduced. Please refer to B-2 for the discussion of impacts to special-status species that occur or have potential to occur.



The proposed revisions would also expand agricultural exemptions and introduce the Alternative Review Process to the Coastal Zone. Presently, most agricultural grading in the Coastal Zone requires grading permit approval. By adding exemptions and the ability for certain projects to be reviewed by the Natural Resources Conservation Service (NRCS) or one of the County's two Resource Conservation Districts (RCDs), this could potentially facilitate grading for agricultural uses in sensitive habitat areas of the County. The proposed addition of agricultural exemptions and the option for alternative review would not affect the implementation of Coastal Plan Policies that have been established for the protection of sensitive habitat areas of the County. Additionally, the revisions will not change the thresholds for which a Coastal Development Permit would be required or the standards for development in an Environmentally Sensitive Habitat Area (ESHA).

The proposed ordinance revisions would also introduce and expand exemptions for restoration in and near watercourses. Such restoration can either be subject to a full exemption or the alternative review process. The full exemption applies only when the applicant is subject to California Department of Fish and Game or Army Corps of Engineers permits, and when inspections are conducted by a local, state, or federal agency. The alternative review process may be used for other restoration practices and streambank protection measures. Projects using the alternative review process will also be subject to any state/federal regulatory permits. Additionally, these projects will be reviewed, overseen, and inspected by the NRCS or one of the RCDs. As these projects will still be subject to state and federal permits, subject to site-specific environmental review, and subject to oversight by a local, state, or federal agency, exempting these projects from County grading permit requirements would not result in a significant impact to biological resources.

Overall, the proposed revisions will strengthen the review criteria for most development projects. Projects which are subject to the Municipal Separate Storm Sewer System (MS4) requirements will need to consider stormwater management upfront, during the initial land use permit or land division process. This will enable consideration of the effect on sensitive habitat areas of the County of stormwater and drainage facilities in the environmental review, and will allow the review authority to consider and address any potential sensitive habitat areas issues upfront.

Because the proposed ordinance will require additional facilities to handle and treat stormwater, for certain types of projects, and Low Impact Development (LID) practices, sensitive habitat areas may be impacted by the increased development.

Mitigation Measures. For all projects with potential impacts, the County should investigate the applicability of various federal, state, and local permit requirements and obtain all required permits prior to construction. In accordance with agency requirements, in the event that wetland or other jurisdictional habitat loss is not avoidable, mitigation should be in-kind and on-site with no net destruction of habitat value. It should be noted that, for the purpose of this analysis, sensitive habitats are defined by those listed in Table 4.3-1, unless otherwise augmented by other federal, state, or local agencies. Additional mitigation beyond compliance with the requirements of existing regulations pertaining to biological resources is described below:



B-1(a)

- Sensitive Habitat Survey and Restoration Plan. Prior to approval of any grading or land use permits which are subject to environmental review, project applicants within potentially sensitive areas as determined by the County based upon review of the California Natural Diversity Database (CNDDB) shall contract with a County approved biologist to survey for sensitive habitats as defined by the County or appropriate state or federal regulatory agencies. If sensitive habitats are found onsite, the applicant shall make all efforts to fully avoid impact to these areas. Where impacts cannot be avoided, the applicant shall contract with a County-approved biologist to develop a Sensitive Habitat Restoration Plan that provides specific measures to enhance and maintain the remaining on-site occurrences of sensitive habitats or to provide off-site mitigation where on-site mitigation cannot fully offset the impact. The Plan could include the following actions:
 - Provide an up-to-date inventory of on-site sensitive habitat(s);
 - Define attainable and measurable goals and objectives to achieve through implementation of the Plan;
 - Provide site selection and justification;
 - Detail restoration work plan including methodologies, restoration schedule, plant materials (seed), and implementation strategies.
 - Where off-site mitigation is necessary, establish a ratio for off-site restoration and a mechanism for preservation.
 - Provide a detailed maintenance plan to include weeding and or spot spraying to keep non-native plant species from further reducing the extent of this habitat type on the property over time. This approach would also have the residual benefit of providing wildland fire protection. Enhancement and maintenance options shall employ recent techniques and effective strategies for increasing the overall area of the sensitive habitats on-site and shall include but not be limited to reseeding or stock container planting disturbed areas with an appropriate native plant palette;
 - Define performance standards. Either in a County approved mitigation site within the proposed rezone site or in a County approved off site area, the total restored area should include 2:1 (Sensitive habitat restored: Sensitive habitat impacted) with at least 50% cover of native shrubs. Acreage may vary depending on the location of the mitigation site and restoration effort. The County may require additional acreage for off site mitigation; and,
 - Provide a monitoring plan to include methods and analysis of results. Also, include goal success or failure and an adaptive management plan and suggestions for failed restoration efforts.
- **B-1(b) Wetland Delineation.** Prior to approval of any grading or land use permits which are subject to environmental review, project applicants



whose land is in potentially sensitive areas as determined by the County shall contract with a County approved biologist to conduct a formal wetland delineation. The delineation shall use methodologies accepted by the Corps and CDFG, and as defined by the County or appropriate state or federal regulatory agencies. The biologist shall determine the location and extent of jurisdictional waters of the U.S. and state on the sites.

A Mitigation Plan shall be developed for areas of disturbance to riparian habitat and other potential wetland areas. The plan shall be prepared by a qualified biologist who is familiar with current Corps and CDFG restoration and mitigation techniques. County required compensatory mitigation shall occur on-site using regionally collected native plant material at a minimum ratio of 2:1 (habitat created to habitat impacted). The resource agencies may require a higher mitigation ratio as a result of the permitting processes.

The plan could include the following components:

- Description of the impact site (i.e., location, responsible parties, jurisdictional areas to be filled/impacted by habitat type);
- Goal(s) of the compensatory mitigation project (type(s) and area(s) of habitat to be established, restored, enhanced, and/or preserved, specific functions and values of habitat type(s) to be established, restored, enhanced, and/or preserved (any lost wetland habitat shall be replaced on-site using regionally collected native plant material at a minimum ratio of 2:1);
- Description of the proposed compensatory mitigation-site (location and size, ownership status, existing functions and values of the compensatory mitigation-site);
- Implementation plan for the compensatory mitigation-site (rationale for expecting implementation success, responsible parties, schedule, site preparation, planting plan);
- Maintenance activities during the monitoring period (activities, responsible parties, schedule);
- Monitoring plan for the compensatory mitigation-site (performance standards, target functions and values, target hydrological regime, target jurisdictional and non-jurisdictional acreages to be established, restored, enhanced, and/or preserved, annual monitoring reports);
- Completion of compensatory mitigation (notification of completion, agency confirmation); and
- Contingency measures (initiating procedures, alternative locations for contingency compensatory mitigation, funding mechanism).
- Identification of potential pollutant sources, that may affect the quality of the discharges to stormwater;



- The proposed design and placement of structural and nonstructural BMPs to address identified pollutants.
- A proposed inspection and maintenance program; and
- A method of ensuring maintenance of all BMPs over the life of the project.
- Long term protection, such as through means of an open space easement.

<u>Significance after Mitigation</u>. Compliance with existing land use regulations and the above listed mitigation measures would reduce impacts on sensitive habitats to a less-than-significant level.

Impact B-2 Future development in accordance with the Grading and Stormwater Management Ordinances would potentially affect special status species. This is Class II, significant but mitigable, impact.

New provisions under the proposed Grading and Stormwater Management Ordinances could have adverse impacts on any of the many special status species within San Luis Obispo County by the requirement of additional facilities and Low Impact Development (LID) measures to handle and treat stormwater, for certain types of projects. As described above in tables 4.3-2 and 4.3-3, there are over 200 recognized sensitive plant and wildlife species within the County.

As discussed under Impact B-1, the proposed revisions would also introduce agricultural exemptions and the Alternative Review Process to the Coastal Zone. Presently, most agricultural grading in the Coastal Zone requires grading permit approval. By adding exemptions and the ability for certain projects to be reviewed by the Natural Resources Conservation Service (NRCS) or one of the County's two Resource Conservation Districts (RCDs), this could potentially facilitate grading for agricultural uses in sensitive habitat areas of the County. The proposed addition of agricultural exemptions and the option for alternative review would not affect the implementation of Coastal Plan Policies that have been established for the protection of sensitive plant and wildlife species. Additionally, the revisions will not change the thresholds for which a Coastal Development Permit would be required or the standards for development in an Environmentally Sensitive Habitat Area (ESHA).

The proposed revisions would modify the types of projects that can go through the Alternative Review Process. This process is overseen by either a federal agency (NRCS) or local agency (RCDs). Projects which are permitted through this process are also subject to an environmental determination under the same or similar parameters.

Overall, the proposed revisions will strengthen the review criteria for most development projects. Projects which are subject to the Municipal Separate Storm Sewer System (MS4) requirements will need to consider stormwater management upfront, during the initial land use permit or land division process. This will enable consideration of the effect on sensitive plant and wildlife species from the construction and operation of stormwater and drainage facilities as part of the project's environmental review process, and will allow the review



authority to consider and address any potential sensitive plant and wildlife species issues upfront.

Because the proposed ordinance will require additional facilities to handle and treat stormwater, for certain types of projects, and LID practices, sensitive plant and wildlife species may be impacted by the increased development.

<u>Mitigation Measure</u>. In addition to B-1 Mitigation Measures, the following mitigation measures would reduce impacts to the extent possible.

- B-2(a) Seasonally-Timed Rare Plant Surveys. For individual projects requiring environmental review, as determined by the County, a County-approved botanist shall conduct seasonally timed directed floral surveys per the requirements of the County or appropriate state or federal regulatory agencies prior to approval of grading or land use permits. The floral surveys shall be based on the target list of plant species identified by the County based upon review of the California Natural Diversity Database (CNDDB) to be completed during the appropriate season to determine the presence or absence of these species. Up to three separate survey visits may be required to capture the flowering period of all target species. The location and extent of any rare plant occurrences observed on a site should be documented in a report and accurately mapped onto site-specific topographic maps and aerial photographs. If special-status plant species are identified, the approved botanist shall submit written proof that the county and CDFG have been contacted. If federally-listed plant species are identified, then the USFWS must also be contacted.
- **B-2(b) Special-Status Plant Buffer.** If State or Federally listed plant species are found as a result of Mitigation Measure B-2(a), site development plans shall be modified prior to approval of grading or land use permits to avoid such occurrences with a minimum buffer of 50 feet. The applicant shall establish conservation easements for such preserved areas, prior to issuance of the first grading permit. The proposed project shall be amended at that time to place these areas formally into open space.
- B-2(c) Special-Status Plant Species Mitigation Plan. If total avoidance of the special status species occurrences (if any) is economically or technologically infeasible, a mitigation program shall be developed prior to approval of grading or land use permits by a qualified botanist under contract with the applicant in consultation with CDFG as appropriate. A research study to determine the best mitigation approach for each particular species to be salvaged may be required to adequately prepare the plan for species that have not been subject to mitigation requirements previously. The special-status plant species mitigation program may include the following:



- The overall goal and measurable objectives of a no-net loss of special status species in the mitigation and monitoring plan;
- Specific areas proposed for re-vegetation and their size. Potential sites for mitigation would be any suitable site within proposed open space, depending on the species, that is appropriately buffered from development.
- Specific habitat management and protection concepts to be used to ensure long-term maintenance and protection of the specialstatus plant species. (i.e., annual population census surveys and habitat assessments; establishment of monitoring reference sites; fencing of special-status plant species preserves and signage to identify the environmentally sensitive areas; a seasonally-timed weed abatement program; and seasonally-timed seed and/or topsoil collection, propagation, and reintroduction of specialstatus plant species into specified receiver sites);
- Success criteria based on the goals and measurable objectives to ensure a viable population(s) on the project site in perpetuity;
- An education program to inform the public of the presence of special-status plant species and sensitive biological resources onsite, and to provide methods that residents can employ to reduce impacts to these species/resources in protected open space areas;
- Reporting requirements to ensure consistent data collection and reporting methods used by monitoring personnel; and
- Funding mechanism.
- B-2(d) Special-Status Plant Monitoring. If monitoring is necessary, then monitoring shall occur annually and shall last at least five years to ensure successful establishment of all re-introduced or salvaged plants and no-net-loss of the species habitat. In the case of annual plants it is difficult to determine if there has been a net loss or gain of a viable population in a five year period. Therefore, an important component of the mitigation and monitoring plan shall be adaptive management. The adaptive management program shall address both foreseen and unforeseen circumstances relating to the preservation and mitigation programs. The plan shall include follow up surveys for five years and then every five years in perpetuity or until a qualified botanist can demonstrate that the target special-status species has not experienced a net loss. It shall also include remedial measures to address negative impacts to the special-status plant species and their habitats (i.e., removal of weeds, additional seeding/planting efforts) if the species or its habitat are suffering a net loss at the time of the follow up surveys.
- **B-2(e) Wildlife Surveys and Mitigation.** For individual projects within sensitive areas as determined by the County, a wildlife survey shall be conducted by a qualified biologist prior to approval of grading permits or land use permits for proposed development areas that may contain sensitive wildlife as defined by the County or appropriate state or federal regulatory agencies. Such surveys would be required prior to



potential development. Appropriate mitigation measures shall be identified by a qualified biologist, and may include one or more of the following measures, as applicable:

- <u>Wildlife Habitat Buffer</u>. Wherever site development is proposed adjacent to wildlife habitat an appropriate buffer of native vegetation shall remain or be established between the habitat area and the proposed development.
- B-2(f) Bird Pre-Construction Survey. In order to avoid impacts to nesting raptors and other avian species, which could result in take that is prohibited under CDFG Code 3503 and 3503.5 and the federal Migratory Bird Treaty Act, construction activities for projects within areas that include trees or other sites that could include bird nests should be conducted outside of the peak breeding season (August 15 to March 15). If construction in such areas is to be initiated between March 15 and August 15, a pre-construction survey should be conducted for nesting avian species (including raptors) within 300 feet of proposed construction activities. If nesting raptors (or any other nesting birds) are identified during pre-construction surveys, an appropriate buffer; to be determined by a County-approved biologist in coordination with the California Department of Fish and Game, should be imposed within which no construction activities or disturbance should take place. If nests are identified, work may only proceed prior to August 15 if a County-approved biologist conducts periodic nest checks and confirms that the nest is no longer active (i.e. the young have fledged) and work re-initiation has been specifically authorized by the appropriate regulatory agency.
- **B-2(g) Minimize Road Widths.** Roadway widths adjacent to open space/agricultural areas shall be reduced to the minimum width possible, while maintaining Fire Department Requirements for emergency access, with slower speed limits introduced.
- **B-2(h)**Permits and Agreements. In the event that State listed species would be impacted as a result of development, developers shall submit signed copies of an incidental take permit and enacting agreements from the CDFG regarding those species as necessary under Section 2081 of the California Fish and Game Code prior to the initiation of grading or construction activities. If a species that is listed under the Federal Endangered Species Act is identified, developers seeking entitlements shall provide proof of compliance with the Federal Endangered Species Act, inclusive as necessary of signed copies of incidental take permit and associated enacting agreements.

<u>Significance after Mitigation</u>. Compliance with the above listed mitigation measures and existing regulations, in combination with careful site planning and development of



specific mitigation measures on a case-by-case basis, will reduce impacts to a less-than-significant level for the Proposed Grading and Stormwater Management Ordinances.

Impact B-3 Future grading and site development in accordance with the Grading and Stormwater Management Ordinances could permanently affect wildlife movement corridors. This is Class II, significant but mitigable, impact.

Future grading and site development under the proposed Grading and Stormwater Management Ordinances could remove areas that are considered wildlife movement corridors. The majority of development would occur within urban fringe areas or in unincorporated infill areas of the County. This increase in development may impact previously undisturbed wildlife movement corridors.

Wildlife movement corridors and habitat linkages are generally defined as connections between habitat patches that allow for physical and genetic exchange between otherwise isolated animal populations. Such linkages may serve a local purpose, such as between foraging and nesting areas, breeding and refuge areas, or they may be regional in nature. Some habitat linkages may serve as migration corridors, wherein animals periodically move away from an area and then subsequently return. A group of habitat linkages in an area can form a wildlife corridor network. Habitat linkages are generally areas by which larger, separate areas of similar habitat values are connected physically. The habitats within the link do not necessarily need to be the same as the habitats that are being linked, they merely need to contain sufficient cover and forage to allow temporary inhabitation by ground-dwelling species.

Typically habitat linkages are contiguous strips of natural areas, though dense plantings of landscape vegetation can serve for certain urban-tolerant species. Depending on the species intended to utilize a corridor, specific physical resources (such as rock outcroppings, vernal pools, oak trees) need to be located within the habitat link at certain intervals to allow slower-moving species to traverse the link. For highly mobile or avian species, habitat linkages may be discontinuous patches of suitable resources, spaced sufficiently close to permit travel along a route in a short period of time.

Because the proposed ordinance will require additional facilities to handle and treat stormwater, for certain types of projects, and Low Impact Development (LID) practices, wildlife movement corridor fringes and entire corridors may be impacted by the increased development.

<u>Mitigation Measures</u>. In addition to B-1 and B-2 Mitigation Measures, the following mitigation measures would reduce impacts to the extent feasible:

B-3(a) Migration Corridors. Prior to approval of any grading or land use permits which are subject to environmental review, applicants of projects subject to the proposed ordinances shall, as determined to be appropriate by County staff, contract with a County-approved biologist to survey for migration corridors. If migration corridors are found



onsite or adjacent to the project site, the grading and site development shall be designed to accommodate wildlife passage.

<u>Significance after Mitigation</u>. Compliance with the above listed mitigation measures and existing regulations, in combination with careful site planning and development of specific mitigation measures on a case-by-case basis, will reduce impacts to a less-than-significant level for projects under the proposed Grading and Stormwater Management Ordinances.

- **c. Cumulative Impacts.** Significance criteria for cumulative impacts to biological resources are based upon:
 - The cumulative contribution of other approved and proposed projects to fragmentation of open space in the project vicinity;
 - The loss of sensitive habitats and species;
 - Contribution of the project to urban expansion into natural areas; and
 - Isolation of open space within the proposed project by future projects in the vicinity.

Implementation of the proposed Grading and Stormwater Management Ordinances would contribute to the cumulative loss of sensitive habitats and species within the County of San Luis Obispo. The identified impacts include the alteration of sensitive habitat areas, the potential loss of special-status plant and wildlife species and the disruption of wildlife movement corridors. As discussed in Section 4.3.2(b) above, compliance with required mitigation measures and existing regulations, in combination with careful site planning and development of specific mitigation measures on a case-by-case basis, would likely reduce impacts to a less than significant level for many of the individual projects under the Grading and Stormwater Management Ordinances. However, because the actual magnitude of impacts and feasibility of mitigation for individual projects cannot be determined at this time, the cumulative effect of future development under the proposed Grading and Stormwater Management Ordinances is potentially significant and unavoidable. Therefore, cumulative impacts would be considered Class I, significant and unavoidable.

